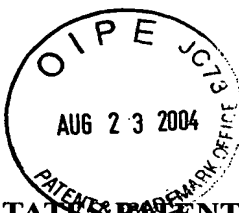


Patent



Customer No. 31561
Docket No. 10665-US-PA
Application No.: 10/605,305

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Applicant : Ho et al.
Application No. : 10/605,305
Filed : 2003/9/22
For : BUMP PROCESS FOR FLIP CHIP PACKAGE
Examiner : GEYER, SCOTT B
Art Unit : 2829

INFORMATION DISCLOSURE STATEMENT

002-1-703-872-9306

(Via fax: 56 pages, followed by confirmation copy via courier)

ASSISTANT COMMISSIONER FOR PATENTS
Arlington, VA22202

Enclosed is a PTO Form 1449 listing 1 reference(s), copy of which is attached. Applicant submits the reference(s) in compliance with his duty of disclosure pursuant to 37 CFR § 1.56 and 1.97. The Examiner is requested to make the citation(s) of official record.

The IDS is being submitted after the mailing date of a notice of allowance. Attached herewith please find a copy of Applicants' statement under 37 CFR § 1.97 (e). Please charge the payment in the amount of US\$180.00 to account No. 50-2620 (Order No.: 10665-US-PA) to cover the fee set forth in 37 CFR 1.17(p).

The submission of the reference(s) should not be interpreted as admitting them as prior art.

Respectfully Submitted,
JIANQ CHYUN Intellectual Property Office

Date: August 20, 2004

By: Belinda Lee
Belinda Lee
Registration No.: 46,863

Please send future correspondence to:

7F. -1, No. 100, Roosevelt Rd., Sec. 2, Taipei 100, Taiwan, R.O.C.

Tel: 886-2-2369 2800 Fax: 886-2-2369 7233 / 886-2-2369 7234

E-MAIL: BELINDA@JCIPGroup.com.tw; USA@JCIPGroup.com.tw

08/24/2004 SSESHE1 00000074 502620 10605305

01 FC:1806 180.00 DA



Customer No.: 31561
Application No.: 10/605,305
Docket No.: 10665-US-PA

PATENT

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant : Kwun-Yao Ho et al.,
Application No. : 10/605,305
Filed : September 22, 2003
Title : BUMP PROCESS FOR FILP CHIP PACKAGE

Grp./Div. : 2829
Examiner : Geyer, Scott B

Docket No. : 10665-US-PA

STATEMENT UNDER C.F.R. 1.97(e)

I, hereby state that no item of information contained in the enclosed Information Disclosed Statement (IDS) was cited in a communication from a foreign patent office in a counterpart foreign application, and, to my knowledge after making reasonable inquiry, no item of information contained in the IDS was known to any individual designated in 37 CFR 1.56(c) (those individuals include: (a) each inventor, (b) each attorney/agent who prepares or prosecutes the application, and (c) every other person who is substantially involved in the preparation or prosecution of the application and who is associated with the inventor, with the assignee or with anyone to whom there is an obligation to assign the application) more than three months prior to the filing of the IDS.

I hereby state that all items of information contained in the IDS, TW 516142; US 09/844224, were found on June 23, 2004 in a prior art search.

Date Aug. 20, 2004

By Wei-Chi Yeh
Patent Engineer
Legal Division
VIA Technologies, Inc.

NOTICE

The Taiwan application TW 516142 claims priority to the US application 09/844,224.

The second embodiment of TW 516142 or US 09/844224 in the IDS is relevant to the patentability of this application. In the second embodiment of TW 516142 or US 09/844224, see Figs. 4A-4C, a plurality of solder balls (48) are sprayed on the surface of the semiconductor die (30). Then, only one solder ball (48) can fit into the individual bump site (40), and the rest of the solder balls (48) may fall on the surface of the passivation layer (36). Next, the solder balls (48) outside the bump sites (40) are sieve out, and thereby each of the solder balls (48) fit into the individual bumping site (40) in a self-aligned manner.

In both TW 516142 & US 09/844224, the solder balls (48) are aligned on the bump sites (40) respectively by using the openings (38) of the passivation (36) and gravity. In the present application, see Fig. 2D and 3D, the solder balls (212 and 312) are aligned on the die pad (206 and 306) by using an adhesive layer (or a sticky film) (210 and 310).

TRANSACTION REPORT

P. 01

AUG-20-2004 FRI 16:40

FOR: JCIPO Taiwan

886 2 2369 8454

DATE	START	RECEIVER	TX TIME	PAGES	TYPE	NOTE	MNO.	DP
AUG-20	16:25	00217038729306	15' 03"	56	SEND	OK	842	

TOTAL : 15M 3S PAGES: 56



Patent

Customer No. 31561
Docket No. 10665-US-PA
Application No.: 10/605,305

IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re application of

Applicant : Ho et al.
Application No. : 10/605,305
Filed : 2003/9/22
For : BUMP PROCESS FOR FLIP CHIP PACKAGE
Examiner : GEYER, SCOTT B
Art Unit : 2829

INFORMATION DISCLOSURE STATEMENT

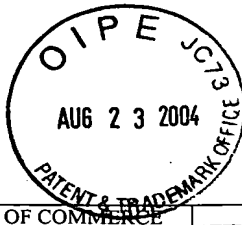
002-1-703-872-9306

(Via fax: 56 pages, followed by confirmation copy via courier)

ASSISTANT COMMISSIONER FOR PATENTS
Arlington, VA22202

Enclosed is a PTO Form 1449 listing 1 reference(s), copy of which is attached. Applicant submits the reference(s) in compliance with his duty of disclosure pursuant to 37 CFR § 1.56 and 1.97. The Examiner is requested to make the citation(s) of official record

BEST AVAILABLE COPY



FORM PTO-1449 U.S. DEPARTMENT OF COMMERCE PATENT AND TRADEMARK OFFICE INFORMATION DISCLOSURE STATEMENT BY APPLICATION	ATTY. DOCKET NO.: 10665-US-PA	APPLICATION NO.: 10/605,305
	APPLICANT: Ho et al.	
	FILING DATE: 2003/9/22	GROUP 2829

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
	09/844,224	2001/4/27	Hsue et al.			

FOREIGN PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	FILING DATE (IF APPROPRIATE)
L.W.	516142	2003/1/1	Taiwan, R. O. C.			2001/12/17

EXAMINER INITIAL	OTHER DOCUMENTS (INCLUDING AUTHOR, TITLE, DATE, PERTINENT PAGES, ETC.)

EXAMINER	DATE CONSIDERED
----------	-----------------

EXAMINER: INITIAL IF CITATION CONSIDERED, WHETHER OR NOT CITATION IS IN CONFORMANCE WITH MPEP 609; DRAW LINE THROUGH CITATION IF NOT IN CONFORMANCE AND NOT CONSIDERED. INCLUDE COPY OF THIS FORM WITH NEXT COMMUNICATION TO APPLICANT.